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10CS/IS761

Seventh Semester B.E. Degree Examination, June/July 2014

C# Programming and .NET

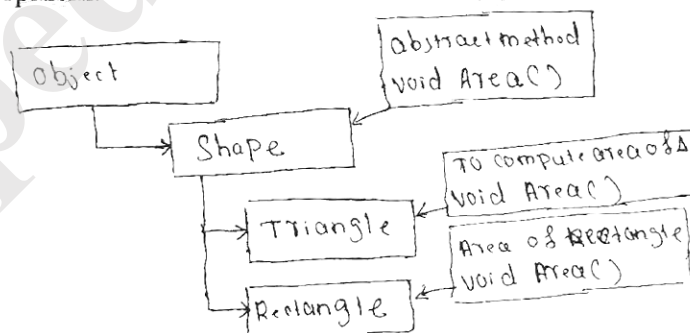
Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART – A

- 1 a. What are the problems with earlier programming languages? Explain. And How .Net provides solution for it. (10 Marks)
b. What defines the set rules in .Net in order to interact one language with other? Explain with example. (10 Marks)
- 2 a. With neat diagram, explain the workflow of .Net execution engine. (10 Marks)
b. How do you build C# application using CSC. exe? Write source code in C# to compute the sum, subtraction and multiplication of two members passed as command line argument. (10 Marks)
- 3 a. Write a C# program to compute row sum and column sum of the rectangular array. (10 Marks)
b. Explain the core members of the system string pass with explain. (10 Marks)
- 4 a. With a C# program to compute the area of triangle and rectangle for the following hierarchy to illustrate polymorphism. (10 Marks)



- b. Define encapsulation. Explain containment/delegation model with example. (10 Marks)

PART – B

- 5 a. Explain the process of finalizing objects in .Net environment. Give the members of system GC and explain their usage, with examples. (10 Marks)
b. Write a program in C# to implement the queue operations INSERT and DELETE with appropriate generic exception for overflow and underflow of queue. Display the elements of queue. (10 Marks)

- 6 a. Explain how do you build cleanable objects in C# with example. (10 Marks)
b. What is an interface? Explain the three methods to obtain interface references with example. (10 Marks)
- 7 a. Write a complete C# program to compute and display sum difference, and multiplication of two numbers by writing appropriate methods which could be called through multicast delegate method of programming. (10 Marks)
b. What are asynchronous delegates? Write the source code in C# to illustrate it. (10 Marks)
- 8 a. Design a C# application for linked list with following operation:
i) Add car
ii) Remove car
iii) Count the number of cars
iv) Cars present. (10 Marks)
b. Write short notes on the following:
i) Cross language inheritance
ii) Operator overloading. (10 Marks)

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